Clinical Trial Protocol
Iranian Registry of Clinical Trials

10 Jun 2026

Comparison of the effectiveness of Cervical Translatoric Mobilizations with Cervical Stability Training in female patients with Cervicogenic Headache

Protocol summary

Study aim
To determine the comparative effectiveness of cervical translatoric mobilizations with cervical stability training on pain and mobility in female patients with cervicogenic headache.

Design
Randomized controlled trial

Settings and conduct
SETTING: Orthopedic Department, Mayo Hospital, Lahore. Neurology Department, Mayo Hospital, Lahore. Physiotherapy Department, Mayo Hospital, Lahore. DURATION OF STUDY: Six months after the approval of synopsis

Participants/Inclusion and exclusion criteria
Inclusion Criteria: Female patients aged 20-40 years Diagnosis of cervicogenic headache Positive cervical flexion-rotation test (FRT) Exclusion Criteria: Patients previously receiving treatment for underlying pathology. Patients presented with red flag signs for headache. Patients presented with migraine. Patients in whom manual therapy is contraindicated. Patients who are diagnosed with radiculopathy. Patients who are taking analgesics.

Intervention groups
GROUP-A: Cervical Translatoric Mobilization This group will receive a 10-minute treatment consisting of 30-second series of translatoric mobilizations of the upper cervical spine with 10-second rest periods between sets. GROUP-B: Cervical Stability Training The Cervical Stability Training consists of three application phases. The first phase will improve muscular coordination and proprioception. The second phase will improve muscular endurance and strength. The final phase will improve muscular strength as well. The intensity of exercise in the third phase will be slightly higher than in the second phase. Based on the exercise tolerance of the patients, all exercises will be repeated 7–10 times during the first week and 10–15 times during the second week of each phase.

Main outcome variables
Pain reduction Increasing range of motion Reduced disability

General information

Reason for update

Acronym

IRCT registration information
IRCT registration number: **IRCT20220518054910N1**
Registration date: **2023-05-31, 1402/03/10**
Registration timing: **registered_while_recruiting**

Last update: **2023-05-31, 1402/03/10**
Update count: **0**

Registration date
2023-05-31, 1402/03/10

Registrant information

Name
Yasham Afzal

Name of organization / entity
King Edward Medical University

Country
Pakistan

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+92 323 7888180

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Recruitment status
Recruitment complete

Funding source

Expected recruitment start date
2023-03-15, 1401/12/24

Expected recruitment end date

2023-07-31, 1402/05/09

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Comparison of the effectiveness of Cervical Translatoric Mobilizations with Cervical Stability Training in female patients with Cervicogenic Headache

Public title

COMPARISON OF THE EFFECTIVENESS OF CERVICAL TRANSLATORIC MOBILIZATIONS WITH CERVICAL STABILITY TRAINING IN FEMALE PATIENTS WITH CERVICOGENIC HEADACHE: A RANDOMIZED CONTROLLED TRIAL

Purpose

Health service research

Inclusion/Exclusion criteria

Inclusion criteria:

The study will include female patients aged 20-40 years. A diagnosis of cervicogenic headache (pain aggravated by neck movement, sustained position or external pressure, restricted cervical range of motion, and unilateral pain starting in the neck and radiating to the frontotemporal region) Positive cervical flexion-rotation test (FRT)

Exclusion criteria:

Patients previously receiving treatment for underlying pathology. Patients presented with red flag signs for headache. Patients presented with migraine. Patients in whom manual therapy is contraindicated. Patients who are diagnosed with radiculopathy. Patients who are taking analgesics.

Age

From **20 years** old to **40 years** old

Gender

Female

Phase

N/A

Groups that have been masked

- Participant
- Care provider
- Investigator
- Outcome assessor
- Data analyser
- Data and Safety Monitoring Board

Sample size

Target sample size: **82**

Randomization (investigator's opinion)

Randomized

Randomization description

All the participants who came to the physiotherapy department were considered and screened for cervicogenic headache with restricted neck movements. 82 patients were allotted to two groups i.e.; group A(CTM) and group B(CST) via a computer-generated randomized list, 41 in each group. Considered the inclusion and exclusion criteria before concerning them in the study. Informed consent was taken whether they were willing to participate or not in written form.

Blinding (investigator's opinion)

Double blinded

Blinding description

Participants were allocated to two treatment groups named A and B. None of the participants know which of the two modes of ultrasound has been used on him/her as both modes require the ultrasound machinery and nothing else. The care provider has been giving treatment according to the protocols decided and he/she has no role in measuring the results. The outcome assessor or the investigator is involved in the outcome measurements of both groups and has no role in applying treatment protocols to the patients or the randomization. The data analyzer is involved in the analysis of data only and has no role in randomization, treatment application, or outcome measurement. None of the members of DSMB are involved in the application of randomization, treatment application, outcome measurement, or data analysis.

Placebo

Not used

Assignment

Parallel

Other design features

Parallel groups, single blinded, single setting

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Advanced Studies and Research Board

Street address

Neela Gumbad, New Anarkali, Lahore

City

LAHORE

Postal code

54000

Approval date

2022-04-05, 1401/01/16

Ethics committee reference number

2543/KEMU/2022

Health conditions studied

1

Description of health condition studied

Cervicogenic Headache

ICD-10 code

G44

ICD-10 code description

Other headache syndromes

Primary outcomes

1

Description
Pain
Timepoint
Before applying Intervention and at week 3 and week 6 of intervention.
Method of measurement
Visual Analogue Scale

2

Description
Range of Motion (Upper Cervical)
Timepoint
Before applying Intervention and at week 3 and week 6 of intervention.
Method of measurement
Goniometer

3

Description
Range of Motion (General Cervical)
Timepoint
Before applying Intervention and at week 3 and week 6 of intervention.
Method of measurement
Goniometer

Secondary outcomes

empty

Intervention groups

1

Description
Intervention group: Cervical Translatoric Mobilizations
Category
Rehabilitation

2

Description
Intervention group: Cervical Stability Training
Category
Rehabilitation

Recruitment centers

1

Recruitment center
Name of recruitment center
King Edward Medical University, Mayo Hospital, Lahore Pakistan
Full name of responsible person
Yasham Afzal
Street address
Nila Gumbad Chowk, Neela Gumbad Lahore.
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Email
yashamafzal61@gmail.com

Sponsors / Funding sources

1

Sponsor
Name of organization / entity
King Edward Medical University, Mayo Hospital Lahore
Full name of responsible person
Yasham Afzal
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Grant name
Grant code / Reference number
Is the source of funding the same sponsor organization/entity?
Yes
Title of funding source
King Edward Medical University, Mayo Hospital Lahore
Proportion provided by this source
100
Public or private sector
Public
Domestic or foreign origin
Domestic
Category of foreign source of funding
empty
Country of origin
Type of organization providing the funding
Academic

Person responsible for general inquiries

Contact
Name of organization / entity
King Edward Medical University, Mayo Hospital Lahore
Full name of responsible person
Yasham Afzal
Position
Post Graduate Resident
Latest degree
Master
Other areas of specialty/work
Physiotherapy

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Person responsible for updating data

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Sharing plan

Deidentified Individual Participant Data Set (IPD)
Yes - There is a plan to make this available
Study Protocol
Yes - There is a plan to make this available
Statistical Analysis Plan
Yes - There is a plan to make this available
Informed Consent Form
Yes - There is a plan to make this available
Clinical Study Report
Yes - There is a plan to make this available
Analytic Code
Yes - There is a plan to make this available
Data Dictionary
Yes - There is a plan to make this available
Title and more details about the data/document
Data will be shared in the form of Excel and Microsoft Word files.
When the data will become available and for how long
6 months after publication
To whom data/document is available
Only available for people working in academic institutions
Under which criteria data/document could be used
The person responsible for data updates will be reviewing requests for data. Data will be shared through email.
From where data/document is obtainable
yashamafzal61@gmail.com
What processes are involved for a request to access data/document
Provide full detail of the reason you want to pursue data from my study. Then wait for a max of one month to receive it if the request for data is approved.
Comments